

**IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA**

CARNEGIE MELLON UNIVERSITY,)
Plaintiff,)
v.) Civil Action No. 2:09-cv-00290-NBF
MARVELL TECHNOLOGY GROUP, LTD.,)
and MARVELL SEMICONDUCTOR, INC.,)
Defendants.)

RESPONSE TO NOTICE OF SUPPLEMENTAL AUTHORITY

Pursuant to this Court's Order dated August 13, 2013 (Dkt. 892), Carnegie Mellon University ("CMU") files this Response to the Notice of Supplemental Authority ("Notice") filed by Defendants Marvell Technology Group, Ltd., and Marvell Semiconductor, Inc. (collectively "Marvell").

I. INTRODUCTION

In the Notice, Marvell continues to mischaracterize CMU's claims.¹ When measured against CMU's actual claims and the record in this case, the August 5, 2013 Opinion in *Lake Cherokee Hard Drive Technologies. L.L.C. v. Marvell Semiconductor, Inc.*, No. 2:10-cv-216 (E.D. Tex.), does not help Marvell's cause and, to the limited extent it may be relevant, supports CMU's position for the following reasons:

First, the *Lake Cherokee* opinion does not address CMU's actual liability and damages theory, *i.e.*, that under 35 U.S.C. § 284 Marvell's total sales are an appropriate measure of the value of Marvell's and its customers' **domestic uses** of CMU's patented methods. *See, e.g.*, Dkt. 829 at 3-14; Dkt. 860 at 3-4, 8. The opinion itself plainly makes that point. *See* Opinion at 4 ("***The*** issue before the Court is whether MSI's domestic activities constitute a ***sale*** under 35 U.S.C. § 271(a).") (emphasis added). Even Marvell concedes that *Lake Cherokee* did not press CMU's use-based infringement theories. *See* Notice at 2, n. 2. An opinion expressly limited to a materially different issue is hardly persuasive authority on the issues pending before this Court.

¹ *See, e.g.*, Notice at 5 (Marvell incorrectly asserts that CMU has argued "that Marvell's sales can provide a measure of use in the United States because Marvell's sales take place in the United States." CMU has never argued that the sales are measure of domestic use "**because**" the sales occur in the U.S., but instead always has asserted that Marvell's total sales are a metric **for the value of** Marvell's and its customers' domestic use); Notice at 6 (Marvell incorrectly describes "CMU's theory" as "linking **extraterritorial use** of Marvell's chips to Marvell's activities in the United States," even though CMU has never invoked foreign uses of the patented methods to support its claims). CMU repeatedly has set forth the specifics of its theories, with citations to places in the record, such as in connection with the argument on Marvell's "emergency" motion and post-trial motions. *See, e.g.*, Dkt. 829 at 3-14; Dkt. 860 at 3-4, 8.

Second, *Lake Cherokee* is based upon a record that differs significantly from the trial record in this case. Indeed, Marvell did not proffer in the *CMU* trial any of the evidence that formed the factual predicate for Judge Gilstrap's ruling, such as purchase orders, so-called overseas funds or the existence and role of the Marvell Bermuda subsidiary (Marvell International) that purportedly owns the chips before they are transferred to MAPL, Marvell's Asian subsidiary. Marvell can hardly claim that an opinion on a materially different record is persuasive authority on the issues pending before this Court. *See z4 Tech., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1356-57 (Fed. Cir. 2007) (rejecting Microsoft's attempt to avoid plaintiff's damages claim by relying upon the record in an earlier Microsoft case where the overseas product distribution scheme was, ostensibly, the same because the evidentiary records in the two cases differed).

Notwithstanding the stark differences in the factual records, *Lake Cherokee* actually **supports** the jury's verdict on CMU's contributory infringement claim, which is the only one of CMU's three liability theories as to which a "sale" is a required element. Judge Gilstrap held that, as to chips imported into the United States by customers, factual issues precluded summary judgment on the basis of the location of the sale. Opinion at 7. Here, Marvell never disputed that the MNP- and NLD-type chips that CMU targeted under 35 U.S.C. § 271(c) were not sold within the United States. *See, e.g.*, Dkts. 702 and 739 (arguing only that the location of the sales cycle was irrelevant). Accordingly, as to contributory infringement, *Lake Cherokee* undercuts Marvell's post-trial arguments despite the limited scope of the opinion.

Third, Marvell's three arguments that *Lake Cherokee* bears upon issues still pending before this Court are meritless. *Lake Cherokee* is easily distinguishable and does not even mention § 284, let alone analyze the damages issues that Marvell presented in its post-trial

arguments in *CMU*. Nor does *Lake Cherokee*'s discussion of the presumption against extraterritorial application of the patent laws bear upon any pending motion.

Finally, the analysis of *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296 (Fed. Cir. 2012), set out in *Lake Cherokee* incorrectly transforms the Federal Circuit's statement that "the location of negotiation and contracting" does not "control" the determination of where a sale occurred into a directive that those facts are irrelevant. This Court already has correctly interpreted *Transocean* and related authority as requiring a "fact-intensive determination" based on a non-exhaustive list of factors including "the location of contracting," "the location of the negotiation of the sale contract," and "the location of the execution of the sale contract." Dkt. 605 at 2. Accordingly, *Lake Cherokee* does not help Marvell on a single issue pending before this Court.

II. ARGUMENT

A. ***Lake Cherokee* Does Not Address CMU's Direct and Induced Infringement Theories and the Damages Resulting Therefrom.**

CMU repeatedly has described its direct and induced infringement theory and the basis for its corresponding damages calculation: As to §§ 271(a) and (b), Marvell and its customers **used** CMU's patented methods in the United States constantly during each winner take all "sales cycle" and, had they not done so, Marvell would not have sold a single chip. As a result, under § 284 Marvell's total sales can be an appropriate measure of Marvell's direct and induced infringement. In other words, CMU's damage claim is grounded exclusively on Marvell's and its customers' domestic use of CMU's invention. *See, e.g.*, Dkt. 672 at 5; Dkt. 441 at 12. This Court recognized that "CMU does not seek damages from alleged infringement of the Accused Chips that are never used in the United States," Dkt. 672 at 5, n. 12, and so instructed the jury. Tr.12/21/12 at 81:7-11 ("[a] reasonable royalty is defined as the monetary amount CMU and

Marvell would have agreed upon *as a fee for use of the invention in the United States*”)
(emphasis added). In short, CMU’s liability and damages claims were based upon conduct rooted entirely in the United States. Dkt. 829, 860 (CMU’s post trial briefs on Marvell’s remittitur motion). As even Marvell concedes, the *Lake Cherokee* opinion does not bear upon liability based upon domestic *use* of a patented method. *See infra* at 5-6.

The *Lake Cherokee* opinion itself confirms its irrelevance to CMU’s direct and induced infringement theories. The *Lake Cherokee* opinion focuses solely on Marvell’s *sales* activities, *not its (or its customers’) uses* of the patented technology. *See* Opinion at 3-6. CMU has never claimed that Marvell’s “sales” are the infringing acts that trigger Marvell’s liability for direct or induced infringement under §§ 271(a) or (b), nor could CMU do so because the claims at issue are methods. *See, e.g.*, Dkt. 441 (the Court’s opinion on Marvell’s motion for partial summary judgment based upon extraterritorial conduct). Thus, although the *Lake Cherokee* court found that certain of Marvell’s “sales cannot be considered to be ‘within the United States’ **under § 271(a),**” *id.* at 5 (emphasis added), that question never arose in the *CMU* case. Indeed, Marvell’s own summary judgment briefing confirms this point, because it asserted (without contest by CMU), that Marvell’s “sales” of the chips accused in that case could not trigger liability for direct infringement of CMU’s method claims. Dkt. 357.

In its Notice, Marvell confirms that the *Lake Cherokee* opinion is irrelevant to the issue pending before this Court. Marvell asserts that “Lake Cherokee argued at various points, similar to CMU, that Marvell’s design, testing and other activities in the United States somehow entitled it to access foreign acts and revenue for damages purposes,” but abandoned such claims after the Federal Circuit decided *Power Integrations*. Notice at 2, n. 2.² In fact, Lake Cherokee

² Here, by arguing that Lake Cherokee’s abandoned theories were “similar” to CMU’s, Marvell

apparently went to trial only on its sales-based theory of direct infringement. *See id.* and Exhibit 1 (verdict slip in *Lake Cherokee* matter). Marvell and CMU can only speculate on the rationale underlying Lake Cherokee's strategic decision to abandon a use-based infringement theory (perhaps the availability of apparatus claims led Lake Cherokee to believe that its simplest and strongest theory was to focus on proving direct infringement by showing U.S. sales of infringing chips). Regardless of why Lake Cherokee pursued theories that differ from CMU's, Marvell cannot seriously contend that Judge Gilstrap's Opinion should override this Court's careful (and repeated) consideration of CMU's use-based infringement theories.

Finally, Judge Gilstrap did not even cite, let alone discuss, this Court's opinions on the so-called extraterritorial issues, nor did he discuss or cite *Power Integrations*. The absence of such discussions further confirms not only that (1) the issues presented to the respective courts are materially different, but also that (2) *Power Integrations* did not represent a sweeping pronouncement of new law on issues of extraterritoriality but is just a narrow decision confined to its facts. In sharp contrast to the irrelevance of the *Lake Cherokee* opinion, the recent decision in *Stryker Corp. v. Zimmer, Inc.*, is much closer to the facts presented in the *CMU* case and confirms the viability of CMU's damages theory:

[I]t is the manufacture of infringing products in this country--not just the sale of infringing products--that constitutes the infringement for which Stryker is entitled to damages 'adequate to compensate for infringement.' See 35 U.S.C. §§ 271(a), 284. Zimmer does not dispute that it manufactured its infringing products in America, nor does it dispute that it realized value from this infringement by selling its products both in the United States and abroad. The jury's decision to

presumably is mischaracterizing both parties' theories when it asserts that they constituted attempts "to access foreign acts and revenue for damages purposes." CMU's claims were based solely upon domestic acts and the resulting revenue. Marvell offered no evidence of so-called "foreign acts and revenue." Regardless of the accuracy of Marvell's characterizations, Marvell's admission that Lake Cherokee abandoned claims that were "similar" to CMU's claims fatally undermines Marvell's arguments that *Lake Cherokee* is somehow relevant to this case.

include the profits Zimmer realized abroad as a result of its domestic infringement was a reasonable way of ascertaining the value Zimmer ultimately realized from its infringement.”

See Exhibit 2, Stryker Corp. v. Zimmer, Inc., No. 1:10-cv-01223-RJJ (Dkt. 537) at 28-29 (W.D. Mich. 8/07/13). In *Stryker*, the directly infringing act under Section 271(a) was the manufacture of infringing products in the U.S., and the value of that infringement was measured by its total sales. *Id.* Here, Marvell’s and its customers’ pervasive use of CMU’s patented methods in the U.S. during the sales cycle are the directly infringing acts committed and induced by Marvell under §§ 271(a) and (b), and, just as in *Stryker*, the value of Marvell’s infringement can be appropriately measured by Marvell’s worldwide sales.

B. Despite Material Differences Between The *Lake Cherokee* Record and This Case Regarding The Location Of Marvell’s Sales, *Lake Cherokee* Supports CMU’s Contributory Infringement Claim.

The trial record in this case amply supports the jury’s finding that all of Marvell’s sales occurred in the United States. *See, e.g.*, Dkt. 860 at 9-10 (outlining the supporting evidence and the lack of evidence proffered by Marvell on this issue); *see also* Dkt. 725 at 15 (same).

Although the underlying record of Marvell’s sales practices in *Lake Cherokee* is not available to CMU and this Court, the factual predicate upon which Judge Gilstrap based his decision plainly differs from the record in this case.

Specifically, Judge Gilstrap lists some thirteen bullet points that he and the parties accepted as true for purposes of the summary motion addressed in his opinion, Opinion at 3-4, but Marvell did not offer evidence to establish these facts during the *CMU* trial. For example, Marvell offered in *CMU* no evidence of: (1) the relationship between product supply agreements and purchase orders (and indeed offered not a single purchase order); (2) the “order location” in MSI’s accounting database; (3) the existence and/or role of its Bermuda subsidiary, Marvell

International;³ (4) the location where title allegedly is passed; and (5) the placement of chip sale revenue in Bermuda and Singapore. In contrast, the trial record here contains Marvell's stipulation that every activity identified as part of the sales cycle takes place in the United States (*see* 12/21/12 Tr. at 50-54); Dr. Bajorek's (unrebutted) opinion that Marvell's sales occur in the U.S. (*see* 12/4/12 Tr. at 105-107); and, finally, Dr. Armstrong's admission that U.S.-based Mr. Brennan closes each sales deal. *See* JX-C at 7 (pp. 212-13 of Dr. Armstrong's deposition testimony).

Perhaps even more telling is Marvell's treatment of the sale location issue in the *CMU* case. In *CMU*, unlike in *Lake Cherokee*, Marvell expressly acknowledged that the parties disputed the location of its sales and took the issue off the table for purposes of summary judgment. Dkt. 357 at 5 n. 3 (Marvell admitting in its summary judgment motion on the so-called extraterritorial issue that “[t]he parties dispute whether the sales of Marvell's Chips take place in the United States or outside of the United States. That dispute is irrelevant to the instant motion.”). Further, as noted above, Marvell did not argue the issue of sales location to the jury, nor did it raise the issue in its JMOL motions during trial, and thereby waived it. *See i4i Ltd. v. Microsoft Corp.*, 598 F.3d 831, 856-7 (Fed. Cir. 2010) (issue waived when not raised in pre-verdict JMOL motion). Indeed, Marvell did not even address the jury's finding that its sales take place in the United States until its *reply brief* in support of its *post*-trial motion for remittitur. *See* Dkts. 809, 855 and 860. Accordingly, at this point and assuming *arguendo* that Marvell has not waived the issue, the only matter still pending in *CMU* regarding the location of Marvell's sales is whether Marvell can overcome the jury's finding that its sales take place in the United States despite overwhelming and unrebutted evidence to the contrary.

³ Furthermore, unlike this case, Judge Gilstrap also expressly noted that the parent company, Marvell Technology Group, Ltd., was not a party in that case.

Moreover, regardless of the different records, Judge Gilstrap's ruling that Marvell could be liable to Lake Cherokee based on the "sale" of Marvell's chips that enter the United States actually supports CMU's contributory infringement claim under Section 271(c). Even on a record where Marvell presented evidence related to, for example, purchase orders and chip ownership, Judge Gilstrap denied Marvell summary judgment on the issue of whether chips that entered the United States constituted infringing domestic sales under 271(a). Marvell has no principled reason to deny that at least those sales would also qualify as "sales" in the *CMU* case under § 271(c). Thus, the gist of Judge Gilstrap's analysis supports CMU's contributory infringement theory, especially as to those chips used by Marvell's customers in the U.S. during each sales cycle as a predicate to each of Marvell's design wins.

C. Marvell's Reasons for the Court to Consider *Lake Cherokee* Are Wrong

Marvell offers three reasons why this Court should take notice of *Lake Cherokee*, but none of those reasons add anything new to Marvell's post-trial briefing and argument.

First, contrary to Marvell's claim that the jury here awarded damages for extraterritorial uses or sales and not "for the infringement" in the United States, Notice at 4-5, CMU's trial presentation and the jury instructions made quite clear that CMU's damages claims were rooted deeply in ***domestic uses*** of CMU's patented methods. Dkts. 829, 860. As CMU demonstrated above, Judge Gilstrap's analysis of a different issue on a different record is irrelevant to the pending post-trial motions.

Second, Marvell misreads *Lake Cherokee* to the extent that it contends that the Opinion addresses damages issues. The Opinion plainly addresses only a single question of liability under Section 271(a), not questions of damages. *See, e.g.*, Opinion at 4 ("***The*** issue before this Court is whether MSI's domestic activities constitute a sale under 35 U.S.C. § 271(a).")

(emphasis added)); at 5 (rejecting Lake Cherokee’s argument that negotiation and execution of the product supply agreement (as opposed to the purchase orders) constituted a sale within the United States); and at 6 (answering in the negative the question whether Lake Cherokee had established a sale in the United States). In addition to the direct focus on a single liability issue, Judge Gilstrap never mentioned Section 284, which goes to damages, thereby confirming that his opinion was focused on a narrow liability issue.

Third, Marvell’s discussion of the presumption against extraterritorial application of the U.S. patent laws again ignores the true nature of CMU’s liability theories, which focus exclusively on domestic conduct. As CMU already has demonstrated, here it is unnecessary to resort to application of the presumption, which “serves to protect against unintended clashes between our laws and those of other nations which could result in international discord,” *Kiobel v. Royal Dutch Petroleum Co.*, 569 U.S. __, 2013 WL 1628935 at *4 (April 17, 2013), because no conflict arises from awarding damages expressly based upon Marvell’s and its customers’ use of CMU’s patented methods in the United States. *See* Dkt. 860 at 1-2.

D. The *Lake Cherokee* Opinion Is At Odds With Governing Federal Circuit Authority

1. Transocean Supports CMU’s Position

Contrary to *Lake Cherokee*, governing Federal Circuit authority requires district courts to consider a host of factors to determine the location of the sales of an accused product. In certain cases, such as *Transocean Offshore Deepwater Drilling, Inc. v. Maersk Contractors USA, Inc.*, 617 F.3d 1296 (Fed. Cir. 2012), the facts so clearly establish that the sale took place in the U.S. that the court can decide the location of the sale as a matter of law. *Id.* at 1310 (“[A] contract between two U.S. companies for the sale of the patented invention with delivery and performance in the U.S. constitutes a sale under § 271(a) as a matter of law.”). When the fact

pattern is less clear, the trier of fact must engage in a fact-intensive determination and no single factor controls: “[A] sale does not occur at a ‘single point where some legally operative act took place.’” *Transocean*, 617 F.3d at 1310 (citing *Litecubes, LLC v. N. Light Prods., Inc.*, 523 F.3d 1353, 1369-70 (Fed. Cir. 2008)).

The *Lake Cherokee* Opinion misinterprets the Federal Circuit’s statement that “the location of negotiation and contracting” does not “control” the determination of where the sale occurred to mean that those facts are irrelevant to the determination. Opinion at 6. The Federal Circuit’s statement does not logically support that conclusion.

The facts of the *Transocean* case are illustrative. There, two U.S. companies negotiated and entered into a contract in Norway for purchase of an oil rig to be built in Singapore at the direction of a Dutch company. *Transocean*, 617 F.3d at 1307. The district court granted summary judgment of noninfringement based, in part, on “the undisputed facts that the negotiation and signing of the contract took place outside the U.S.” *Id.* at 1308. The Federal Circuit reversed. It reasoned that the “location of negotiation and contracting,” *i.e.* Norway, did not “control” (in the sense of compelling the conclusion that the sale occurred abroad) because of the numerous U.S. connections to the sale. *Id.* at 1310. In fact, the U.S. links were so strong that the Federal Circuit held that the sale occurred in the U.S. as a matter of law. *Id.*

In holding that the negotiation and contracting abroad did not “control” the case before it, the Federal Circuit *did not* thereby hold that the location of negotiation and contracting was *irrelevant* to, or insufficient to support, a conclusion that the sale occurred in the U.S. To the contrary, the Federal Circuit’s holding indicates that the location at which the sales contract was negotiated, executed, and entered can be *critical* when determining where the sale occurred because “a ‘sale’ *is not limited to the transfer of tangible property; a sale may also be the*

agreement by which such a transfer takes place.” *Id.* at 1311 (emphasis added). Accordingly, *Lake Cherokee* rests upon a misreading of Federal Circuit precedent.

2. This Court Has Considered, and Rejected, This Argument

In fact, this Court already has analyzed this issue precisely as described above. In its November 2012 ruling on Marvell’s Motion in *Limine* No. D8, *see* Dkt. 605 at 2, this Court considered the authority cited in *Lake Cherokee* and reached a different (and correct) conclusion. Marvell moved in *limine* for an order precluding CMU from introducing any evidence regarding Marvell’s taxes or its tax strategy. Dkt. 605 at 1. In ruling on Marvell’s motion, the Court held that certain evidence could be probative of “the location of the sales of the Accused Chips.” *Id.* at 2.⁴ The Court explained—relying on *Transocean*, *Litecubes*, and related authority—that the location of a sale is a “fact-intensive determination” based on a non-exhaustive list of factors. *Id.* Among those factors are “the location of contracting,” “the location of the negotiation of the sale contract,” and “the location of the execution of the sale contract.” Dkt. 605 at 2. In so ruling, the Court properly rejected any reading of *Transocean* that would eliminate those factors from consideration. Thus, the Court already has rejected the analysis set out in *Lake Cherokee*, and Marvell offers no reason the Court should depart from its prior ruling.

III. CONCLUSION

For the foregoing reasons, CMU respectfully submits that the *Lake Cherokee* Opinion does not materially add to the previous briefing and argument on the pending post-trial motions.

⁴ Marvell ultimately chose not to introduce any documents regarding the location of its sales, and it did not rebut any of CMU’s evidence (including from testimony from Drs. Bajorek and Armstrong) demonstrating that all such sales occurred in the U.S. *See* Dkt. 860 at 9-10. Having made the strategic choice not to introduce such evidence, Marvell may not use *Lake Cherokee* to attempt to introduce new evidence post-trial.

Respectfully submitted,

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CERTIFICATE OF SERVICE

I hereby certify that on August 20, 2013, the foregoing was filed electronically. Notice of this filing will be sent to all parties by operation of the Court's electronic filing system. Parties may access this filing through the Court's system.

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